

Notice of Allowability

Application No.

10/006,605

Examiner

Merilyn P. Nguyen

Applicant(s)

SMITH ET AL.

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/01/2006.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 06/15/2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. In response to the communication dated August 01, 2006, claims 1-28 are active in this application and in the condition for allowance.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Marcel K. Bingham, Reg. No. 42,327 on 08/18/06.

The application has been amended as follows:

1. (Currently Amended) A computer-implemented method, the method comprising the steps of:

a database management system receiving a request to generate a materialized view that contains objects of an object class;

in response to receiving said request, said database management system creating said materialized view;

said database management system performing operations on said objects as instances of said object class;

wherein said object class defines attributes and one or more routines to invoke to operate on the state of the objects of said object class;

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wherein attribute values of an object contained in said materialized view are derived from one or more base tables;

wherein the step of creating said materialized view includes creating a container table, separate from said one or more base tables, that includes corresponding columns that correspond to said attributes and that hold the attribute values of said attributes; and

storing said attribute values of said attributes in said container table.

2. Claims 15-28, line 1, "A computer-readable medium carrying" has been changed to --A computer-readable storage medium storing--.

Allowable subject matter

3. The following is an examiner's statement of reason for allowance:

None of the references of record Harumi and Elke (in the article "Using Object-Oriented Principles to Optimize Update Propagation to Materialized Views"), Raitto (US Patent No. 5,991,754) and Lieuwen (US Patent No. 6,272,502) teaches or suggests the claimed (Claim 1) invention having, in addition to the other limitations in the claims, the limitation of "wherein attribute values of an object contained in said materialized view are derived from one or more base tables; wherein the step of creating said materialized view includes creating a container table, separate from said one or more base tables, that includes corresponding columns that correspond to said attributes and that hold the attribute values of said attributes".

Dependent claims 2-28 are allowable because they depend from base claims.

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4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

5. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Liu U.S Patent No. 6,741,997 discloses instantiating objects in distributed database systems.

Cochrane U.S Patent No. 6,339,769 discloses query optimization by transparently altering properties of relational tables using materialized view.

Norcott U.S Patent No. 6,334,128 discloses method and apparatus for efficiently refreshing sets of summary tables and materialized views in a database management system.

Chenho Kung discloses, "Object subclass hierarchy in SQL: A Simple Approach", 1990.

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Harumi A. Kuno and Elke A Rundersteiner discloses, " Incremental Maintenance of Materialized Object-Oriented Views in Multiview: Strategies and Performance Evaluation", 1998.

Jixue Liu, Millist Vincent and Mukesh Mohania disclose, "Incremental Maintenance of Nested Relational Views".

Fawaz s. Al-Anzi and David L. Spooner discloses, "Modeling Behavior, a Step Towards Defining Functionally Correct Views of Complex Objects in concurrent Engineering, 1994.

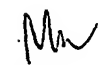
Vivekanand Gpalkrishnan, Qing Li and Kamalakar Karlapalem disclose, "Issues of Object-Relational view Design in Data Warehousing Environment", 1998.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Merilyn P Nguyen whose telephone number is 571-272-4026.

The examiner can normally be reached on M-F: 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


MN
August 18, 2006


DON WONG
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